

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): Membrane filter unit for liquid or gaseous media, with a bundle, or a plurality disposed in any desired manner, of capillary membranes (1) open on at least one face, which are cast into a sealing layer (3) that has hardened to form a solid head piece, in a region close to the end, with regard to the open membrane end (2), whereby the open membrane ends (2) protrude on the outside of the sealing layer (3), ~~characterized in that~~ wherein the sealing layer (3) is disposed on a spacer (4) that has a layer that is penetrated by the capillary membranes (1) and is impermeable for the casting material that hardens to form the sealing layer (3).

Claim 2 (Currently Amended): Membrane filter unit according to claim 1, ~~characterized in that~~ wherein the spacer (4) consists of a perforated plate whose openings (5) enclose the capillary membranes (1) essentially without a gap.

Claim 3 (Currently Amended): Membrane filter unit according to claim 1, ~~characterized in that~~ wherein the spacer (4) consists

of a flexible plastic strip (12) that has openings or lateral slots (13) for accommodation of the capillary membranes (1).

Claim 4 (Currently Amended): Membrane filter unit according to claim 3, ~~characterized in that~~ wherein the plastic strip (12) is wound up in spiral shape, or ~~that~~ segments of the plastic strip can be combined to form a multi-layer package.

Claim 5 (Currently Amended): Membrane filter unit according to claim 1, ~~characterized in that~~ wherein the spacer (4) has a functional layer of fine-particle solid and/or a soft substance and/or a film, which is punctured by the ends of the capillary membranes.

Claim 6 (Currently Amended): Membrane filter unit according to claim 5, ~~characterized in that~~ wherein the functional layer is disposed in a carrier provided with openings.

Claim 7 (Currently Amended): Method for the production of the membrane filter unit according to ~~one of claims 1 to 6~~ claim 1, whereby capillary membranes are inserted into a spacer with one protruding end, which spacer has a layer that is penetrated by the capillary membranes and is impermeable for casting material, and

whereby a sealing layer of viscous casting material is applied to the spacer, which material fills the free space between the capillary membranes that protrude at the top of the spacer, up to a level below the membrane ends, and hardens to form a solid head piece.

Claim 8 (Currently Amended): Method according to claim 7, ~~characterized in that~~ wherein a plate with openings is used, into which the capillary membranes are introduced.

Claim 9 (Currently Amended): Method according to claim 8, ~~characterized in that~~ wherein each opening has a capillary membrane assigned to it, in each instance.

Claim 10 (Currently Amended): Method according to claim 7, ~~characterized in that~~ wherein the spacer has a layer that is impermeable for the casting material, which is punctured during insertion of the capillary membranes.

Claim 11 (Currently Amended): Method according to claim 10, ~~characterized in that~~ wherein the layer that is punctured during insertion of the capillary membranes consists of fine-particle solid, a soft substance, or a film.

Claim 12 (Currently Amended): Method according to claim 7, ~~characterized in that~~ wherein the capillary membranes are inserted into openings or lateral slots of a plastic strip and ~~that~~ the plastic strip is wound up into a spiral or segments of the plastic strip are combined to form a package.

Claim 13 (Currently Amended): Method according to ~~one of claims 7 to 12~~ claim 7, ~~characterized in that~~ wherein the ends of the capillary membranes that protrude above the spacer remain unclosed during application of the casting material.

Claim 14 (Currently Amended): Method according to ~~one of claims 7 to 13~~ claim 7, ~~characterized in that~~ wherein the casting material is fed in at the top of the spacer, next to the capillary membranes.

Claim 15 (Currently Amended): Method according to ~~one of claims 7 to 14~~ claim 7, ~~characterized in that~~ wherein the casting material is fed in through one or more openings of a component that accommodates the casting material.

Claim 16 (Currently Amended): Method according to ~~one of claims 7 to 15~~ claim 7, ~~characterized in that~~ wherein the sealing layer is applied to the spacer in several layers, whereby the lower layer, in each instance, has hardened at least partially

before the next layer is applied.